1 BEFORE THE POLLUTION CONTROL HEARINGS BOARD 2 STATE OF WASHINGTON 3 IN THE MATTER OF 4 CONTINENTAL GRAIN COMPANY, PORT OF TACOMA, and JONES WASHINGTON STEVEDORING COMPANY, PCHB Nos. 85-78; 85-83 6 Appellants, and 85-101 7 PINAL FINDINGS OF FACT. ٧. CONCLUSIONS OF LAW PUGET SOUND AIR POLLUTION 3 AND ORDER CONTROL AGENCY, 9 Respondent. 10

THIS MATTER, the appeal of two notices and orders of two civil penalties of \$1,000 each for allowing the emission of airborne particulate matter from a grain loading operation, came on for hearing before the Board at Lacey on August 15, 1985. Seated for and as the Board were Lawrence J. Faulk (presiding). Wick Dufford and Gayle Rothrock, have reviewed the record. Respondent agency elected a formal hearing, pursuant to RCW 43.21B.230 and WAC 371-08-155. Donna Woods, court reporter of Robert H. Lewis & Associates, officially

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reported the proceedings.

Appellant Port of Tacoma was represented by Robert MacLeod, Chief Engineer. Appellant Continental Grain was represented by attorney at law Michael E. Peiler. Appellant Jones Stevedoring Company was represented by operations manager, Douglas Sterns. Respondent agency was represented by its legal counsel, Keith D. McGoffin.

Witnesses were sworn and testified. Exhibits were admitted and examined. Argument was heard. From the testimony, evidence, and contentions of the parties, the Board makes these

# FINDINGS OF FACT

I

Respondent, pursuant to RCW 43.21B.260, has filed with the Board a certified copy of its Regulations I and II and all amendments thereto dated July 25, 1985. We take official notice of those regulations.

ΙI

On February 7, 1985, in the afternoon while on routine patrol, an inspector from PSAPCA observed fugitive dust emissions rising from grain loading aboard a ship at Continental Grain's pier at #11 Schuster Parkway, Tacoma, Pierce County, Washington. The Continental Grain facility in question is located within an area of Tacoma where concentrations of airborne particulates fail to meet the national ambient air quality standards designed to protect human health and welfare (non attainment area).

III

The inspector proceeded to a view point at the southeast parking Final Finding of Fact, Conclusions of Law & Order PCHB Nos. 85-78, 85-83 & 85-101 2

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area of the grain elevator. Grain dust was observed rising from two holds of the vessel Golden Phoenix. The emission was constant from both holds for a twenty-two minute period of direct observation. Opacity was not recorded.

ΙV

During the observation, the inspector took four photographs from the forward and aft holds showing fugitive dust emissions escaping from the grain loading of the ship.

The inspector contacted the plant manager for Continental Grain. The manager indicated that he was aware of the dust and said part of the problem was caused by the separation of a flex pipe on boom number one's air system. The manager indicated to the inspector that the problem in the foreward hold was simply that the hold is 97 feet deep and the spout won't reach that far. Grain is dropped from the end of the shipping gallery spout to the bottom of the hold forming a pad. Until the pad builds to the spout's level, dust escapes. The inspector boarded the vessel Golden Phoenix prior to leaving the terminal and found its deck to be extremely dusty.

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On February 8, 1985, the inspector issued field notice of violation (No. 20498) for an infraction of the agency's Regulation I, Section 9.15 for causing or allowing airborne particulate matter to be emitted in sufficient quantities and of such characteristics and duration as is or is likely to be, injurious to human health or which unreasonably interferes with enjoyment of life and property.

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On April 29, 1985, respondent agency issued a formal Notice and Order of Civil Penalty No. 6265 of \$1,000 for the same asserted violation. From this action, appellant Continental Grain appealed to this Board on May 13, 1985, becoming our number PCHB 85-78. Appellant Jones Stevedoring Company's appeal was received by the Board on May 17, 1985, and became our number PCHB 85-83. The Port of Tacoma was joined as an additional appellant on June 4, 1985.

# VII

On April 3, 1985, while on routine patrol in the morning, an inspector from PSAPCA observed grain dust emissions from grain loading aboard a ship at Continental Grain's pier at #11 Schuster Parkway in Tacoma, Pierce County, Washington. The dust emissions were coming from Continental Grain Company's shipping gallery spout number 2 while it was loading grain into the hold of the vessel Beaver State.

#### VIII

On arrival at the grain terminal's east parking area, the inspector saw that the dust was escaping from the end of spout number 2 which was the center spout. Spout number 1 was raised above the ship's deck and was not in use. Spout number 3 was near deck level and was not in use. The inspector observed that the normal fitting, called a "bullet," at the end of spout number 2 had been removed. It had been replaced with a rectangular chute which was not connected to the air processing system.

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During the observation, the inspector took two photographs and noted some tan dust emissions of about fifty percent opacity.

recorded inspector tan dust opacities for forty-three The minutes. At the end of the recording period, the inspector determined that fourteen and one-half minutes of the forty-three minute period had exceeded the twenty percent opacity standards of Regulation I, The inspector further observed that for sixteen Section 9.03(b)(2). and one-quarter minutes, visible emissions were created by the grain The inspector determined that this was a violation loading operation. of Section 9.15 of Regulation I and WAC 173-400-040(8). The inspector telephoned the assistant manager of Continental Grain Company and R.L. MacLeod, Chief Engineer of the Port of Tacoma, and informed them that notice of violation was being issued.

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On April 3, 1985, the inspector issued field notice of violation (No. 20563) for an infraction of the agency's Regulation I, Section 9.03 for causing or allowing dust emissions from loading of grain with gallery spout number 2 into the hold of the vessel Beaver State for a period of more than three minutes in one hour greater than 20% opacity.

On May 22, 1985, respondent agency issued a formal Notice and Order of Civil Penalty No. 6271 of \$400 for the same asserted violation. From this action, appellant Continental Grain appealed to this Board on June 3, 1985, becoming our cause number PCHB 85-101.

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Appellant Continental Grain has had previous encounters with PSAPCA dating back to 1979 for allowing airborne particulate matter (dust) to escape from grain loading operations. There are indications that since the inception of operation of this grain elevator in 1975, Continental Grain has had 49 citations and \$8,150 has been paid in assessed penalties for circumstances relative to grain loading which they assert are beyond their control.

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Appellant Continental Grain testified that the grain loading "standard" elevator in Tacoma is a in the industry. The basic principal of the design is to stop the falling of grain at discharge end of an aspirated vertical spout with a so-called "dea box" or "bullet" from which the grain then falls from a static position to the pile of grain in a vessel's hold no more than two to grain, therefore, has little or five feet. The no velocity to generate dust.

However, when loading extremely large bulk carrier vessels having deep draft, the loading spout and control system is unable to reach sufficiently close to the vessel bottom for maintenance of the necessary two to five feet from the grain, even with a spout extension. Consequently, grain must free fall 10 to 20 feet until cargo height has reached a point close to the spout discharge. During this early filling of deep holds, a small amount of dust escapes from the hatch opening. Since they cannot structurally or mechanically

alter the spout system to reach lower, they know of no alternative to prevent this escape.

The loading of a tanker-type vessel presents a unique problem in that tanker openings are extremely small circular openings in contrast with the large open hatches of a bulk carrier. Some openings in the vessel's wing tanks are often only 10°-12° in diameter, while their loading spout is three feet in diameter. Hence, a spout can never be actually placed inside the opening; as a result, all the grain must free-fall to the bottom of the tanks from the deck opening with the displaced air exiting with dust. The particulate emissions, while exceeding opacity limits near the opening, are usually not wide spread and are confined to a small area. Here again they know of no acceptable method to prevent this.

The emissions associated with "tween-deck" vessels are a common problem in all grain loading ports throughout the U.S. The very nature of the vessel (1 or 2 lower decks) dictates the use of a "spoon" or mechanical "trimmer." The National Cargo Bureau regulations require that all voids beneath these decks be filled for stability of the vessel and to prevent shifting of the cargo during This can only be accomplished with trimmers which throw the grain 15 to 20 feet in a trajectory to fill the voids. this procedure creates dust, some of which eventually exits through the hatch openings. This is often the case even with so-called NCB surveillance "self-trimming" bulk carriers inasmuch as dictated trimming fore and aft of the hatch openings. For these

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vessels, Continental asserts, there is no known effective method of containing these emissions during the trimming procedures.

In summary, Continental asserts that no adequate technology exists for compliance with PSAPCA's regulations for visible emissions under certain specific conditions, namely:

- 1. When starting the loading of a very large deep-draft vessel;
- 2. When loading a tanker-type vessel; and
- 3. When the configuration of the vessel requires the use of a spoon or mechanical trimmer to satisfy National Cargo Bureau regulations for vessel stability, including certain bulk carriers.

Continental initially requested this Board to issue a variance for violations under these identified conditions. At hearing, this request was refined to a defense asserting impossibility of compliance.

In the cases before us, the events of February 7 represent the deep draft-vessel situation and the events of April 3 represent the tanker-type vessel problem.

## XIII

psapca advocates the use of hatch tents in deep-draft vessel loading and seals for tanker-type vessels. These techniques, specified in Continental's original approval as an air contaminant source, are believed by the agency to provide effective means for controlling particulates in loading ships with grain.

Appellants questioned both the effectiveness and the safety of these techniques. Continental is experimenting with USP grade mineral oil to supress the dust, but are unsure whether it is practical.

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Despite the problems experienced, we conclude that Continental has not proven that compliance is utterly impossible. Obviously, techniques acceptable to all parties have not been found. But the experts even in their disagreement are discussing possible solutions.

VIX

The Port of Tacoma, as landowner, leases the grain loading facilities to Continental. The Port does not supervise or direct loading operations.

Jones Stevedoring Company performs services for Continental in connection with loading ships. Jones, however, does not exercise effective control over loading. They rent pollution control equipment from Continental for loading jobs. They neither engineer nor maintain such equipment. Rather they operate the system the grain elevator provides.

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Any Conclusion of Law hereinafter determined to be a Finding of Fact is hereby adopted as such.

From these Facts, the Board comes to these

CONCLUSIONS OF LAW

Ι

The Board has jurisdiction over these persons and these matters. Chapters 43.21B and 70.94 RCW.

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RCW 70.94.011 states, in pertinent part:

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It is declared to be the public policy of the state to secure and maintain such levels of air quality as will protect human health and safety and comply with the requirements of the federal clean air act, and, to the greatest degree practicable, prevent injury to plant and animal life and property, the comfort convenience of foster and inhabitants, promote the economic and social development of the state, and facilitate the enjoyment of the natural attractions of the state.

IV

Section 9.03 of Regulation I, entitled "Emissions of Air Contaminent: Visual Standard," states in pertinent part:

- (b) After July 1, 1975, it shall be unlawful for any person to cause or allow the emission of any air containment for a period or periods aggregating more than three (3) minutes in any one hour which is:
- (1) Darker in shade than that designated as No. 1 (20% density) on the Ringelmann Chart, as published by the United States Bureau of Mines.

Section 9.15 of Regulation I, entitled "Airborne Particulate Matter" states:

It shall be unlawful for any person to cause or allow:

- (a) particulate matter to be handled, transported or stored, or
- (b) a building or its appurtenances or a road to be constructed, altered, repaired or demolished, or
- (c) untreated open areas located within a private lot or roadway to be maintained in such a manner that particulate matter is emitted in sufficient quantities and of such characteristics and duration as is, or is likely to be, injurious to human health, plant or animal life, or property, or which unreasonably interferes with enjoyment of life and property.

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We conclude that dust did escape from the grain loading operations on February 8, and April 3, 1985, and that these excursions violated the airborne particulate matter and opacity standards of Though no harm was shown, significant particulate emissions in a non-attainment area are "likely to be injurious" as that term is used in the regulation. The ambient air standard which is not being attained in the area is itself a health and welfare standard.

VΙ

Under the circumstances present here, we conclude that neither the port of Tacoma nor Jones Stevedoring Company did "cause or allow" the violations in question. For the purposes of the civil penalties at issue, we conclude that Continental is the legally responsible party.

VII

The Washington Clean Air Act, chapter 70.94 RCW, is a strict Explanations do not operate to excuse violations liability statute. of regulations adopted under its authority. Air contaminent sources are required to conform to such regulations.

## VIII

RCW 70.94.181 provides a separate and distinct procedure obtaining a variance from the regulations of an air pollution control This procedure involves applying to the agency itself and, after an information-gathering hearing, receiving a ruling from the agency based on statutory criteria. The agency's ruling could then be appealed to this Board.

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This Board, however, does not have authority either to hear or decide variance requests made to it in the first instance as a means of defending against a violation and civil penalty.

Continental's "impossibility" defense raises the kind of question the state Clean Air Act assigns to the variance process. One of the statutory grounds for issuance of a variance is:

that there is no practicable means known or available for the adequate prevention, abatement or control of the pollution involved... RCW 70.94.181(2).

We conclude, therefore, that the issue raised in the "impossibility" defense must under the statute be first presented to the agency in a variance proceeding. we cannot grant a variance under the guise of recognizing a particular legal defense.

IX

determining whether a fine should bе sustained In against Continental Grain, the surrounding facts and circumstances are relevant. Factors bearing on reasonableness must be considered. These include:

- (a) the nature of the violation;
- (b) the prior behavior of the violator; and
- (c) actions taken to solve the problem.

Х

Appellant Continental Grain in this case did cause a violation. Appellant has a previous history of violating PSAPCA's Regulation I. However, the company has made considerable effort to eliminate the problem and continues to do so. There is no problem the vast majority Final Finding of Fact, Conclusions of Law & Order PCHB Nos. 85-78, 85-83 & 85-101

of the time. No solution acceptable to all parties was made known to the Board. Appellant might very well, therefore, consider the desirability of requesting a variance from PSAPCA to cover the circumstances identified in its testimony until an acceptable solution is found.

ΧI

On the record before us, we conclude that assessing a penalty against Continental Grain is justified. Weighing the facts of this case and the testimony and behavior of appellants, we conclude that the order set forth below is appropriate.

XII

Any Finding of Fact which is deemed a Conclusion of Law is hereby adopted as such.

From these Conclusions of Law the Board enters this

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ORDER

The Notices and Orders of Civil Penalties Nos. 6265 and 6271 are affirmed as to Continental Grain Company. Said notices and order are reversed as to the Port of Tacoma and Jones Stevedoring Company.

DONE this 14th day of October, 1985.

POLINTION CONTROL HEARINGS BOARD

AULK, Chairman

Layle Bothrock

WICK DUFFORD, Lawyer Member

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